

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number  
**WO 2005/040311 A1**

- (51) International Patent Classification<sup>7</sup>: **C10G 11/04**, 11/05, 11/18, B01J 23/10
- (21) International Application Number: PCT/EP2004/011457
- (22) International Filing Date: 12 October 2004 (12.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/511,101 15 October 2003 (15.10.2003) US  
03078313.8 21 October 2003 (21.10.2003) EP
- (71) Applicant (*for all designated States except US*): **ALBE-MARLE NETHERLANDS B.V.** [NL/NL]; Stationsplein 4, NL-3818 LE Amersfoort (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **KUEHLER, Christopher, W.** [US/US]; 7 upper Ardmore Road, Larkspur, CA 94939 (US). **O'CONNOR, Paul** [NL/NL]; Hogebrinkerweg 9, NL-3871 KM Hoevelaken (NL). **STAMIREN, Dennis** [US/US]; 3401 Colony Plaza, Newport Beach, CA 92660 (US).
- (74) Agent: **SCHALKWIJK, Pieter, Cornelis**; Akzo Nobel N.V., Intellectual Property Department (Dept. AIP), P.O.Box 9300, NL-6800 SB Arnhem (NL).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: COMPOSITION FOR REDUCING OX EMISSIONS IN FCC REGENERATION PROCESS

(57) Abstract: A composition comprising FCC catalyst particles and additive particles suitable for the reduction of NO<sub>x</sub> emissions from a FCC regenerator, said additive particles comprising a Mg and Al-containing anionic clay or solid solution, a rare earth metal oxide, alumina and/or silica-alumina, and Y-type zeolite. The invention further relates to a process for preparing such a composition and its use for reducing NO<sub>x</sub> emissions.

WO 2005/040311 A1